



## MORRIS ANIMAL FOUNDATION POSITION DESCRIPTION

**POSITION TITLE:** Software and Database Developer

**REPORTS TO:** Senior Director Information Systems

**DEPARTMENT:** Information Systems

**MORRIS ANIMAL FOUNDATION:** Morris Animal Foundation (MAF) is the largest nonprofit dedicated to improving animal health. With more than 70 years of experience, we have grown to support dogs, cats, horses, llamas and wildlife, funding more studies, in more species, in more places than any other organization. In addition to funding research, we are conducting our own, with the Golden Retriever Lifetime Study now in its fifth year. From pets to wildlife, the work we do advances diagnostics, treatments and cures for the world's most critical animal health challenges. To date, our work has supported more than 20,000 species!

**GOLDEN RETRIEVER LIFETIME STUDY:** The Golden Retriever Lifetime Study (GRLS) is a longitudinal study of approximately 3,000 gold retrievers, in which detailed information (including medical, lifestyle and environmental data) and biological samples are routinely collected throughout the life of each dog. The goal of this study is to discover new insights into the causes and risk factors for a variety of disorders commonly found in golden retrievers and other breeds of dogs. This project was launched in 2012 and is expected to run until at least 2024.

**POSITION SUMMARY:** This position is responsible for hands-on development of databases, data processing software and web-based user interfaces for the Foundation and the Golden Retriever Lifetime Study using MySQL, PHP, Python, Drupal, and other tools as appropriate.

### **ESSENTIAL FUNCTIONS:**

- **RELATIONAL DATABASE IMPLEMENTATION.** Responsible for implementing, maintaining and evolving relational databases in support of the Golden Retriever Lifetime Study. This will involve the implementation of new databases as well as migrating existing databases from MS Access to MySQL.
- **MySQL DATABASE ADMINISTRATION.** Responsible for routine database administration and tuning of the MySQL database(s). This includes managing database replication, schema migration, performance tuning, etc.
- **SOFTWARE DEVELOPMENT.** Responsible for designing, writing and testing software for data processing and database maintenance, typically in PHP and/or Python.

- **WEB APPLICATION DEVELOPMENT.** Implement basic, but functional, user interfaces to the relational database(s) for use initially by project staff, and later by people outside of MAF. The applications will initially be focused on data maintenance and querying. Over time, we expect to support more public-facing user interfaces. This work will most likely be done in Drupal, Laravel, or some other PHP-based framework.
- **ANALYSIS AND DESIGN.** Participate, along with others on the GRLS project, in the analysis and design work for both the database and user interface development. This will involve standard domain and workflow analysis, along with interface mock-ups and user reviews.

## **REQUIREMENTS**

- Minimum 5 years of experience designing, implementing, managing and supporting relational databases.
- Minimum 5 years of experience developing web applications using Drupal, Laravel, or something similar, with a relational database backend.
- Minimum 2 years experience developing software in PHP and/or Python, and SQL.
- Experience with software configuration and release management, preferably using git.
- Excellent organizational, interpersonal, verbal and written English communication skills.
- Knowledgeable about dogs, with passion and empathy for companion animals and their owners, and a dedication to the Foundation's mission.
- Must love animals!

## **ADDITIONAL DESIRED QUALIFICATIONS**

- Relevant bachelor's degree (e.g., computer science, life sciences, other science) or equivalent experience.
- Experience developing scientific databases and applications, especially in bio-medical and/or clinical research.
- Experience designing, implementing and administering MySQL databases and, in particular, Amazon-hosted MySQL-style databases.
- Experience with database performance tuning.
- Knowledge of, and experience with, industry-standard database and application security methods and policies.
- Project management experience.
- Animal health experience and/or knowledge.

Full time, exempt position. Competitive salary and excellent benefit package.

Please email your resume, cover letter and salary requirements in a word document or pdf, labeled with your complete name to Michael Cinkosky at [mcinkosky@morrisonanimalfoundation.org](mailto:mcinkosky@morrisonanimalfoundation.org). Please list "Software and Database Developer" in the subject line of your email.